Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 (currently amended). A method for processing a digital ~~color~~ image, comprising the steps of:

a) providing a subject matter detector for distinguishing between target and background subject matters;

b) applying the subject matter detector to the image to produce a belief map <u>of values</u> indicating the degree of belief that pixels in the image belong to target subject matter;

c) providing an image enhancement operation that is responsive to a control signal for controlling the degree of image enhancement; and

d) applying image enhancement operation to the digital image by varying the control signal <u>pixel by pixel</u> according to the belief map to produce an enhanced image.

2 (original). The method claimed in claim 1, wherein a plurality of subject matter detectors are provided, and further comprising the step of selecting one or more of the provided subject matter detectors.

3 (original). The method claimed in claim 1, wherein a plurality of image enhancement operations are provided, and further comprising the step of selecting one or more of the provided image enhancement operations.

4 (original). The method claimed in claim 1, wherein the target subject matter is human flesh.

5 (original). The method claimed in claim 1, wherein the target subject matter is clear blue sky.

6 (original). The method claimed in claim 1, wherein the target subject matter is lawn grass.

7 (original). The method claimed in claim 1, wherein the target subject matter is snow field.

8 (original). The method claimed in claim 1, wherein the target subject matter of is a body of water.

9 (original). The method claimed in claim 1, wherein the image enhancement operation is sharpening.

10 (original). The method claimed in claim 1, wherein the image enhancement operation is noise reduction.

11 (original). The method claimed in claim 1, wherein the image enhancement operation is tone scale adjustment.

12 (original). The method claimed in claim 1, wherein the image enhancement operation is scene balance adjustment.

13 (original). The method claimed in claim 1, wherein the image enhancement operation is color re-mapping.

14 (original). The method claimed in claim 1, wherein the image enhancement operation is JPEG de-blocking.

15 (original). The method claimed in claim 1, wherein the image enhancement operation is image magnification employing interpolation.

16 (original). The method claimed in claim 15, wherein the image interpolation is selectable between bilinear interpolation and fractal based interpolation.

17 (original). The method claimed in claim 2, wherein the target subject matters include human flesh, clear blue sky, lawn grass, snow fields, and water bodies.

18 (original). The method claimed in claim 3, wherein the image enhancement operations include sharpening, noise reduction, JPEG de-blocking, tone scale adjustment, scene balance adjustment, and color re-mapping.

19 (original). The method claimed in claim 1, wherein the control signal is varied in accordance to the belief map and to a signal related to the sizes of regions within the belief map.

20 (original). The method claimed in claim 1, wherein the control signal is varied in accordance to the belief map and a signal related to the locations of regions within the belief map.

21 (original). The method claimed in claim 1, wherein the control signal is varied in accordance to the belief map and a scalar derived from an analysis of the belief map.

22 (currently amended). The method claimed in claim 1, further comprising the step of reducing the resolution of the digital ~~color~~ image prior to applying the subject matter detector.

23 (original). The method claimed in claim 1, further comprising the step of analyzing the belief map to generate the control signal.

24 (original). The method claimed in claim 23, wherein the analysis includes determining the size of each belief region and enhancing the control signal based on the size.

25 (original). A computer program product for performing the method of claim 1.

26 (currently amended). A system for processing a digital ~~color~~ image, comprising:

a) a subject matter detector ~~for~~ distinguishing between target and background subject matters in the digital ~~color~~ image to produce a belief map <u>of values</u> indicating the degree of belief that pixels in the digital ~~color~~ image belong to target subject matter; and

b) an image enhancement operator responsive to the belief map, <u>said image enhancement operator</u> ~~for~~ controlling the degree of image enhancement <u>pixel by pixel,</u> in accordance with the degree of belief.

27 (new). The method of claim 1 wherein said values indicate more than two different degrees of belief that respective pixels in the image belong to target subject matter.

28 (new). A method for processing a digital image, comprising the steps of:

automatically assigning one of three or more different belief values to each of the pixels of the image, said belief values each indicating the degree of belief that the respective pixel in the image belongs to target subject matter; and

automatically enhancing each of the pixels of the digital image to produce an enhanced image, said enhancing varying in degree, pixel by pixel, in accordance with respective said belief values.

29 (new). The method of claim 28 wherein said assigning is based upon color and texture features.

30 (new). The method claimed in claim 28, further comprising making a belief map of said belief values; analyzing said belief map to provide an analysis result; and wherein said enhancing varies in accordance with said belief map and said analysis result.

31 (new). The method claimed in claim 28, further comprising selecting one or more of a plurality of subject matter detectors and using said one or more subject matter detectors to produce said belief values.

32 (new). The method claimed in claim 31, wherein said using further comprises reducing the resolution of the digital image prior to applying the subject matter detector.

33 (new). The method claimed in claim 31, further comprising selecting one or more of a plurality of image enhancement operations, and using said one or more image enhancement operations in said enhancing.